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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,819	04/16/2004	Leonard T. Chapman	54767.8068.US00	1737

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EXAMINER

SAUNDERS, PAUL

ART UNIT	PAPER NUMBER
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4136

MAIL DATE	DELIVERY MODE
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10/17/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/826,819

Applicant(s)

CHAPMAN, LEONARD T.

Examiner

Paul Saunders

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/1/2006
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1, 3-5, 8, 15-16** rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,158,490 to Gottschalk et al. ("Gottschalk").

As to **claim 1**, Gottschalk discloses a camera support, comprising: a base 63; an isolator plate 44 attached to the base 63 and pivotable in a vertical direction (fig. 5); one or more springs 92 for exerting a spring force between the base and the plate; and one or more dampening elements 83 for exerting a dampening force between the base and the plate.

As to **claim 3**, Gottschalk discloses a camera support, comprising: a vertical axis system including: a base 48; an arm 15 pivotably attached to the base 48; at least one spring 105 connected to the base and to the arm; at least one dampener 83 connected to the base and to the arm (col. 4 lines 24-27); a horizontal axis system (camera and components) supported by the vertical axis system (base and arm); and a leveling linkage connecting the vertical and horizontal axis systems (fig. 5 – arm 15 incorporates leveling linkage such as 46 combined with 47 such that camera stays level).

As to **claim 4**, Gottschalk further discloses the camera support of claim 3 further including adjustment features for adjusting the leveling linkage to compensate for angulation movement of the base (col. 4 lines 10-30, col. 5 lines 15-37 – the weight of the camera is relieved from the cameraman's hands by the adjustable spring, and piston assembly in which the camera "floats" even with the varying angularities introduced by the cameraman walking and running).

As to **claim 5**, Gottschalk discloses a shock and vibration isolator for a camera, comprising: first and second spaced apart side plates (fig. 3 48 – the two protruding sides at 51 constitute side plates); an axle connecting to the side plates (fig. 6 – 51 like 50, has a rod or axle); an arm 15 attached to the axle, with the arm pivotable relative to the side plates (col. 3 lines 11-30 – relative to the side plates of 48 it pivots); a bar attached to the side plates; at least one spring 92, 115 connected to the arm 15 and to the bar (fig. 3); at least one viscous dampener 83 connected to the arm and to the bar (col. 4 lines 1-7); first and second spaced apart leveling plates pivotably attached to the arm (fig. 5, 6 – where arm parts 47 connect to part 44 on two sides, this constitutes two plates that are spaced apart and pivotably attached); and first and second leveling rods pivotably attached respectively to the first and second side plates (fig. 5, 6 – arm parts 46 constitute the leveling rods which connect to both side plates).

As to **claim 8**, Gottschalk further discloses the isolator of claim 5 further including means for adjusting tension in the springs (fig. 6, col. 4 lines 21-23).

As to **claim 15**, Gottschalk further discloses the camera support of claim 1 with the spring exerting a spring force at an angle of 2-15 degrees to a plane of the isolator plate (fig. 5 – a plane of the isolator plate 44 at it's top shows the spring 93 exerting force at point 50 within 15 degrees of said plane).

As to **claim 16**, Gottschalk further discloses the camera support of claim 1 further comprising a camera mounting plate 21 pivotably supported on the isolator plate (fig. 5 – the camera can pivot), and a levelling system associated with the mounting plate and the isolator plate (arm 15 provides a leveling system regardless of the vertical pivot of the arm), for keeping the camera mounting plate level as the isolator plate pivots vertically (fig. 5, 6 15).

3. **Claim 14** rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,621,786 to Greenlee.

As to **claim 14**, Greenlee discloses a method for supporting a camera, comprising the steps of: placing the camera on a camera plate supported 77 for movement on a mobile base (col. 1 lines 46-55, col. 3 lines 39-41); adjusting tension in one or more springs acting on the camera plate, to move the camera plate and the camera into a level horizontal position (fig. 3 60, col. 8 lines 10-13); applying a dampening force to the camera plate (col. 6 lines 58-62); and allowing the camera plate to pivot up and down vertically (col. 1 lines 35-43, col. 39-43), to allow the camera to remain in a substantially steady position (col. 2 lines 20-25), as the mobile base moves over a supporting ground surface having irregularities (col. 2 lines 26-28, 44-46).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 2, 9-13** rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,158,490 to Gottschalk et al. ("Gottschalk"), in view of U.S. Patent No. 4,989,823 to Chapman.

As to **claim 2**, Gottschalk further discloses the camera support of claim 1 further comprising, and a leveling system associated with the plate and the horizontal isolator assembly.

Gottschalk does not disclose a horizontal isolator assembly supported by the plate.

Chapman discloses a horizontal isolator assembly (figs. 2-7, col. 1 lines 44-67).

Gottschalk and Chapman are analogous art because they are from the same field of endeavor namely camera support.

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the previous camera mount to further incorporate between the camera mount and the camera the horizontal isolator as taught above by Chapman. The motivation would have been to prevent shock and vibration disturbances (Chapman col. 1 lines 16-19, 44-46).

Therefore it would have been obvious to combine Gottschalk and Chapman to obtain the above modifications.

As to **claim 9**, it has not expressly been disclosed yet: the isolator of claim 5 further including a horizontal axis isolator supported on the leveling plates

Chapman discloses a horizontal axis isolator supported by a level camera support (figs. 2-7, col. 1 lines 44-67).

The same motivation is used here as is used in claim 2.

As to **claim 10**, Chapman further discloses the isolator of claim 9 with the horizontal axis isolator including a first longitudinal bar 18 slidable through a first fitting 60 on the first leveling plate, and a second longitudinal bar 20 slidable through a second fitting 62 on the second leveling plate, and a first lateral bar 22

and a second lateral bar 24 extending between and supported by the first and second longitudinal bars (fig. 2 28 30 32 34), and a mounting plate 16 slidable along the first and second lateral bars (fig. 3-7 – 14 appears square wherein longitude and latitude are indistinguishable).

The same motivation is used here as is used in the parent claim.

As to **claim 11**, Chapman further discloses the isolator of claim 10 with the first and second lateral bars having a radius of curvature of 60-168 inches (fig. 6, col. 3 lines 26-38).

The same motivation is used here as is used in the parent claim.

As to **claim 12**, Chapman further discloses the isolator of claim 10 further comprising lateral springs acting to hold the mounting plate at a lateral central location on the lateral bars, and longitudinal springs acting to hold the mounting plate at a longitudinal central location on the longitudinal bars (fig. 3, col. 2 lines 55-59); a pair of lateral dampeners 52 attached to the mounting plate; and a pair of longitudinal dampeners 52 attached to the mounting plate (fig. 3, 7).

The same motivation is used here as is used in the parent claim.

As to **claim 13**, Chapman further discloses a camera support 10 14, comprising: vertical isolation means 10 for reducing inadvertent vertical movement of a camera (fig. 1 10, col. 4 lines 29-38); longitudinal isolation means supported by the vertical isolation means (fig. 1), for reducing inadvertent longitudinal movement of the a camera; and lateral isolation means supported by

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the longitudinal isolation means, for reducing inadvertent lateral movement of the camera (fig. 1, 2, col. 3 lines 48-53).

3. **Claim 6** rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,158,490 to Gotschalk et al. ("Gotschalk"), in view of U.S. Patent No. 6,752,541 B1 to Dykyj.

As to **claim 6**, it has not been expressly disclosed yet: the isolator of claim 5 further including a turnbuckle between the arm and the spring.

Dykyj discloses using a turnbuckle between a spring and a connection point to maintain an adjustable tension.

Gotschalk and Dykyj are analogous art because they are from the same field of endeavor namely camera support.

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the previous adjustable springs to rather be adjustable with a turnbuckle as taught above by Dykyj. The motivation would have been to allow manual adjustment of the tension in the assembly (Dykyj col. 9 lines

Therefore it would have been obvious to combine Gotschalk and Dykyj to obtain the above modifications.

4. **Claim 7** rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,158,490 to Gotschalk et al. ("Gotschalk"), in view of U.S. Patent No. 4,849,778 to Samuelson.

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As to claim 7, it has not expressly been disclosed yet: the isolator of claim 5 further including one or more alternate attachment positions for the leveling rods on the side plates or the leveling plates.

Samuelson discloses multiple connection points for adjusting the leveling assembly (figs. 1-3, col. 6 lines 32-38).

Gottschalk and Samuelson are analogous art because they are from the same field of endeavor namely camera support.

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the previous leveling system to further include adjustment means as taught above by Samuelson. The motivation would have been to allow for varied boom arm movement and control in response to other adjustments to the camera support (Samuelson col. 6 lines 32-38).

Therefore it would have been obvious to combine Gottschalk and Samuelson to obtain the above modifications.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 4,408,744 to Thompson pertains to claims 10, 12.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Saunders whose telephone number is 571.270.3319. The examiner can normally be reached on Mon-Thur 8:30am-4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derrick Ferris can be reached on 571.272.3123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PS/



10/15/02
DERRICK W. FERRIS
SUPERVISORY PATENT EXAMINER